Remarks

Claims 10-36 remain in the application.

Claim 12 has been amended to correct a just noticed typographical error.

Claims 10-36 were rejected under the judicially created doctrine of double patenting over claims 1-9 of U.S. Patent No. 5,772,659. The conflicting patent and this application are commonly owned and a terminal disclaimer in compliance with 37 C.F.R. 1.321(c) is enclosed as part of this response.

Claims 29-36 were rejected under 35 U.S.C. 102(e) as being anticipated by Lindenmeier et al. (U.S. Patent No. 5,868,739).

Applicants' claim 29 is directed toward a power control circuit for an electrosurgical generator including a means for controlling the output voltage in response to the circuit impedance load. The controlling means operates by adjusting a feedback control signal which controls the output of the electrosurgical generator. The controlling means also includes a correction circuit having a comparator and a reducer. The comparator compares the amplitude of a high impedance reference signal to the output voltage, and the reducer reduces the amplitude of the feedback control signal to a preset reduced voltage level signal if the output voltage is greater than the amplitude of the high impedance reference signal.

Lindenmeier et al. discloses a controller for a high frequency tissue cutting device, where a characteristic of the generator is adjusted to a first value. The output of the generator and a second desired value are compared in an evaluation unit, and the evaluation unit adjusts the first value according to the comparison. In column 7, line 61 through column 8 line 9, Lindenmeier et al. further disclose that the first value may be further controlled by an impedance sensing circuit and set to a preset low value until the impedance undercuts a preset limit.

Applicants respectfully assert that this is different from Applicants invention which reduces the amplitude of the feedback control signal to a preset reduced

voltage level signal if the output voltage is greater than the amplitude of the high impedance reference signal. Thus, Lindenmeier et al. discloses setting a first characteristic to a low value until an impedance falls to a predetermined level, while Applicants disclose reducing an amplitude if an output voltage exceeds a reference signal. At least for this reason, Applicants submit that Lindenmeier et al. does not anticipate Applicants' invention as disclosed by claim 29.

Claims 30-31 depend from claim 29 and as such, benefit from the provisions of the claim from which they depend. Applicants therefore submit that claims 30 and 31 are also not anticipated by Lindenmeier et al.

Claim 32 is directed toward a power control circuit for an electrosurgical generator including a means for controlling the output current in response to the impedance load. A feedback control signal controls the output of the electrosurgical generator. The controlling means includes a correction circuit which has a switcher. The switcher compares the amplitude of the feedback control signal to an amplitude of a maximum control voltage reference signal and operates to substitute the maximum control voltage reference signal if the amplitude of the feedback control signal exceeds the amplitude of the maximum control voltage reference signal. This operates to limit the output current when an impedance load is at a low level.

As mentioned above, Lindenmeier et al. disclose that a first value of a generator characteristic may be further controlled by an impedance sensing circuit and set to a preset low value until the impedance undercuts a preset limit. Applicants maintain that this different than Applicants invention where a switcher compares the amplitude of a feedback control signal to an amplitude of a maximum control voltage reference signal and operates to substitute the maximum control voltage reference signal if the amplitude of the feedback control signal exceeds the amplitude of the maximum control voltage reference signal. Lindenmeier et al. is not seen to disclose comparing the amplitude of a feedback control signal to an amplitude of a maximum control voltage reference signal. Further, Lindenmeier et al. is not seen to teach or suggest substituting a signal for another if an amplitude is exceeded. Therefore, Applicants submit that claim 32 is not anticipated by Lindenmeier.

Claims 33-36 depend, directly or indirectly, from claim 32 and as such, benefit from the provisions of the claims from which they depend. For this reason, Applicants submit that claims 33-36 are also not anticipated by Lindenmeier et al.

Claims 29-36 were rejected under 35 U.S.C. 102(e) as being anticipated by Shipp (U.S. Patent No. 5,792,138).

The Shipp patent is directed toward a battery powered electrocautery unit that monitors the voltage and current being output and utilizes the information to maintain output power at one of a number of preset levels selected by a user, even as the load resistance changes during use.

Applicants maintain that this is different from Applicants' invention as disclosed by Applicants' claim 29. Shipp is not seen to teach or suggest, among other things, Applicants' correction circuit having a comparator and a reducer. Shipp further fails to teach or suggest that a comparator compares the amplitude of a high impedance reference signal to the output voltage, and that a reducer reduces the amplitude of the feedback control signal to a preset reduced voltage level signal if the output voltage is greater than the amplitude of the high impedance reference signal. In contrast, Shipp discloses:

> Thus the product of the signals at inputs AD2 and AD3 is proportional to the cautery output being supplied to the tissue. As the tissue impedance changes during the cauterizing or cutting process, a software sub-routine resident in microprocessor 14 adjusts the duty cycle of the PWM output signal to driver circuit 13 to maintain the selected power level pre-selected by the user. (Column 5, lines 35-41, emphasis added)

Therefore, Applicants respectfully assert that Applicants' claim 29 is not anticipated by Shipp.

Claims 30-31 depend from claim 29 and as such, inherit all the provisions of the claims from which they depend. Applicants' therefore maintain that dependent claims 30 and 31 are also not anticipated by Shipp.

Applicants also maintain that Applicants' claim 32 is not anticipated by Shipp. Shipp fails to disclose comparing the amplitude of a feedback control signal to an amplitude of a maximum control voltage reference signal. In addition, Shipp fails to disclose substituting a signal for another if an amplitude is exceeded. At least for these reasons, Applicants submit that claim 32 is not anticipated by Shipp.

Claims 33-36 depend, directly or indirectly, from claim 32 and as such, benefit from the provisions of the claims from which they depend. For this reason, Applicants maintain that claims 33-36 are also not anticipated by Shipp.

Reconsideration and allowance of the claims is respectfully requested.

Respectfully submitted,

9/11/2000
Date

Harry E. Smith
Ohlandt, Greeley, Ruggiero & Perle
Attorney for Applicant(s)
Registration No. 32,493
(203) 327-4500